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INCIDENTAL TEACHING AND LECTURING

University and College
Yale School of Management and Organization
Harvard Law School, Telecommunications Seminar
Suffolk University Law School
University of Maine
Boston University

Other
Edison Electric Institute
(Electricity Consumers Resource Council)

January 19, 1998

AFFIDAVIT OF ALFRED E. KAHN AND TIMOTHY J. TARDIFF
BEFORE THE FEDERAL COMMUNICATIONS COMMISSION
In the matter of Application of SBC Communications Inc.,
Southwestern Bell Telephone Company,
and Southwestern Bell Communications Services, Inc.
d/b/a Southwestern Bell Long Distance
for Provision of In-Region, InterLATA Services in Oklahoma

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BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554

In the matter of	)	
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Services, Inc. d/b/a Southwestern Bell Long	)	
Distance for Provision of In-Region,	)	
InterLATA Services in Oklahoma	)	

AFFIDAVIT OF
ALFRED E. KAHN AND TIMOTHY J. TARDIFF

Alfred E. Kahn and Timothy J. Tardiff, being duly sworn, depose and say:

I. INTRODUCTION

1. My name is Alfred E. Kahn. I am the Robert Julius Thorne Professor of Political Economy, Emeritus, Cornell University and Special Consultant with National Economic Research Associates, Inc. (NERA). I have been Chairman of the New York State Public Service Commission and of the Civil Aeronautics Board; and in my capacity as Advisor to President Carter on Inflation, I participated actively in the successful efforts of his Administration to deregulate both the trucking industry and the railroads. I am the author of the two-volume *The Economics of Regulation*, reprinted in 1988 by MIT Press, and have written and testified extensively in the area of direct economic regulation, and particularly of the railroad, trucking, airline and telecommunications industries. Of particular relevance to my statement here, I have also been a member of the Attorney General's National Committee to

Study the Antitrust Laws (1954-56) and the National Commission on Antitrust Laws and Procedures (1978-80). I am the co-author of *Fair Competition, The Law and Economics of Antitrust Policy* and have published numerous articles in that area. I attach a copy of my full resume as Appendix A.

2. My name is Timothy J. Tardiff. I am a Vice President at National Economic Research Associates. I have specialized in telecommunications policy issues for about the last 15 years. My research has included studies of the demand for telephone services, such as local measured service and toll, analysis of the market potential for new telecommunications products and services; assessment of the growing competition for telecommunications services; and evaluation of regulatory frameworks consistent with the growing competitive trends. Most recently, I have participated in interconnection arbitrations, pursuant to the Telecommunications Act of 1996, in twelve states. I attach a copy of my full resume as Appendix B.

3. SBC Communications Inc. and its subsidiaries Southwestern Bell Telephone Company ("SWBT") and Southwestern Bell Communications Services, Inc. d/b/a Southwestern Bell Long Distance ("SBLD")—collectively, "Southwestern Bell"—seek authority for SBLD to provide in-region interLATA services in the State of Oklahoma. The purpose of this affidavit is to assess the public interest implications of such entry.

II. THE HISTORICAL TRADE-OFF IN THE LINE-OF-BUSINESS RESTRICTIONS

A. The Issue During the Pre-divestiture Period

4. The progressive introduction of competition into the telephone business, dating back to the FCC's *Above-890* decision in 1959 and to *MCI* a decade later, and AT&T's

evolving responses precipitated intense controversy at the FCC, Congress, the Antitrust Division of the Department of Justice and the courts over how best to reconcile the dominant position of the comprehensively integrated Bell System, on the one side, and the evolving national policy of encouraging competition, on the other.

5. We make no effort to recount that history.[1] We think it is not an oversimplification, however, to say that once the commitment to competition was reached at the Federal level, the central issue was the extent to which *regulatory* restraints on AT&T would be sufficient to ensure fair and efficient rivalry between it and its challengers or whether, instead, it would be necessary to break up the Bell System, imposing line-of-business restrictions on the successor companies, in order to deprive them of the power and motive to frustrate achievement of that goal. In these intense debates, AT&T and its supporters in government resolutely proclaimed the benefits of the comprehensive horizontal and vertical integration of the Bell System, and its adversaries tended to minimize those asserted benefits to the point of denying their existence entirely.

6. What ultimately tipped the scales on the side of complete divestiture of local telephone service from the other operations of the Bell System—notably toll—was the developing view of the Department of Justice that all the proposed protections against cross-subsidization, predation and exclusionary practices would be excessively "regulatory" and ineffective, and that only a total separation of the putatively "naturally monopolistic" local

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[1] A particularly thorough history is presented by Peter Temin in *The Fall of the Bell System, A Study in Prices and Politics*, New York: Cambridge University Press, 1987. For an account of developments and the underlying economic issues up to 1970, see Alfred E. Kahn, *The Economics of Regulation*, New York: John Wiley & Sons, 1970-71, reprinted by MIT Press, 1988, Vol. 2, pp. 126-152, 290-306.

telephone service from the other potentially more competitive services would be consistent with the preservation and promotion of competition in the latter markets.

B. The Balance of Advantages and Disadvantages has Shifted

7. The terms of the trade-off between the respective benefits of integration and divestiture have changed drastically since the entry of the MFJ. In fact, whatever one's evaluation of the net advantages and disadvantages of the line-of-business restraints on the BOCs during this interval, they clearly must be reconsidered in the light of (a) the dramatically changed factual circumstances; (b) our experience with the way competition has worked in the interLATA market and increasing recognition of the important contribution that BOC entry is likely to make in intensifying that competition and extending its benefits more broadly; (c) the changes in both regulatory practice and in the market that have tended to dilute whatever power the BOCs may have had to handicap competitors; (d) the extensive experience we have actually had since 1982 with competition between the putatively monopolistic BOCs and rivals dependent upon them for essential services and (e) changes in the mix of national policies and goals articulated most clearly in the Telecommunications Act of 1996. In our judgment, all these factors have shifted the balance of the public interest—wherever it was in 1982—unequivocally over to elimination of those absolute restrictions.

8. This proposition has now been endorsed, in both general terms of national policy and in highly specific ways, by the Telecommunications Act of 1996. We have now made our choice. *The Act clearly concludes that the balance of advantages and disadvantages has shifted in favor of abandoning the line-of-business restraints on the BOCs.* It makes that

abandonment conditional upon a public interest finding by the FCC; in our opinion that criterion has been satisfied.

III. SOUTHWESTERN BELL'S ENTRY IS IN THE PUBLIC INTEREST

9. Whatever may be said in its favor, the current prohibition on interLATA entry by the RBOCs is also, undeniably, inherently anticompetitive. In the name of preserving competitive opportunities for some, it prohibits others from competing entirely. The only possible justification for its continuance would be that the gains to society from protecting the former outweigh the costs of excluding the latter and that those protections could not be achieved by other means less costly to consumers. The remaining portions of this statement consist of an amplification of our reasons for concluding that the balance of advantages and disadvantages has shifted in favor of abandoning the line-of-business restraints on the BOCs.

10. The costs are great. The excluded competitors are large and potent. The market from which they are excluded—a market whose boundaries have been defined entirely arbitrarily, so far as the relevant technology and economics are concerned—has distributed the benefits of rapidly improving productivity and competition imperfectly and incompletely. The customers that have benefited disproportionately little are precisely the ones that the excluded BOCs would have the greatest comparative advantage in serving: those companies will therefore be the most logical and effective competitors for residential and small business services initiated within their own regions. Unlike MCI and Sprint in 1984, *they already serve all of these customers*. Supplying additional services to an existing customer is far easier—and *less costly*—than establishing a commercial identity and presence before new ones.

A. The Current State of InterLATA Competition

11. The most fundamental change in interstate long-distance markets since the 1984 divestiture and the one most relevant in the present context is that this portion of the industry is not only dominated by AT&T, MCI and Sprint but consists exclusively (apart from a few corridor areas that were exempted from the long-distance restriction) of companies entirely separate from—indeed antagonistic to—the successor Bell Operating Companies. In addition, the rapid development and expansion of fiber-optic technology has radically altered cost structures, much as advances in microwave technology did a decade or two earlier, and contributed to a dramatic expansion—approximately a trebling—of total network capacity in just 11 years. Whereas previously there was only the one nationwide long-distance network, totally integrated with companies accounting for some 80 percent of all local service, there are now nearly four backbone long-distance networks, fully separated from the BOCs. Those four clearly do compete with one another, as well as with a large fringe of much smaller rivals, facilities-based and resellers. *That competition is, however, far from fully effective; and its deficiencies are ones that competitive entry by the BOCs is most likely to remedy.*

1. Long distance prices, access charges and margins, overall

12. Since divestiture—that is, between the beginning of 1984 and mid-1997—long-distance prices have declined about 22 percent in nominal dollars and about 50 percent relative to the Consumer Price Index (CPI).[2] What is at least equally striking, however, is that these decreases have been more than fully "explained" by FCC-mandated decreases in the prices that the long-distance carriers pay to the local exchange carriers for access to their networks. (We

[2] As measured by the consumer price index for interstate long-distance. U.S. Department of Labor, Bureau of Labor Statistics, Office of Publications, Division of Information Services.

emphasize that the evidence we present here is of the change in prices alone, for given volumes of usage. This is not the same as average revenue per minute, as we will explain presently.) Turning first to the reduction in access charges, according to the FCC, the average interstate switched access charge per conversation minute fell about 65 percent from May 1984 to May 1997—a decline of about 11 cents per conversation minute.[3] To make this reduction possible, the FCC imposed monthly subscriber line charges directly on telephone customers, shifted costs to the intrastate jurisdiction through changes in separations rules and adopted price cap formulas that mandated reductions over time in those charges. We show below that the long-distance carriers failed to reflect fully in their prices these reductions in their direct costs of providing long-distance services.

13. According to a recently-published estimate, AT&T's annual carrier access bill dropped by about $10.3 billion between 1984 and April 1995 (holding volumes constant, in order to reflect the pure change in price), while over the same period of time the bills that its customers received fell by about $8.5 billion (once again holding volumes constant).[4] If anything, the divergence between the changes in access charges and long-distance prices has become even more striking in the last few years: while access charges have continued to fall, prices net of access charges have risen.[5] Access charges per conversation minute decreased by

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[3] Federal-State Joint Board Staff. *FCC Monitoring Report*, May 1997, Table 5.12, p. 616.

[4] William E. Taylor and J. Douglas Zona, "An Analysis of the State of Competition in Long-Distance Telephone Markets," *Journal of Regulatory Economics*, May, 1997, pp. 227-256.

[5] Even when average revenue per minute is used to measure prices—a measure which we demonstrate below overstates the decline in toll prices—AT&T's own data show that between the end of 1994 and the end of 1996, prices fell by no more than the reduction in access charges. (Affidavit of R. Glenn Hubbard and William H. Lehr on behalf of AT&T Corporation, AT&T Exhibit G, In the Matter of Application by SBC Communications Inc. for Authorization Under Section 271 of the Telecommunications Act of 1996 to Provide In-Region, InterLATA Services in the State of Oklahoma, CC Docket No. 97-121, Figure 3).

about 9 percent between April 1995 and July 1997.[6] In the same period, interstate toll prices (as measured by the CPI-telephone, interstate) increased by 5 percent. Obviously interstate toll rates and access charges have not changed to the same degree since 1995—they have not even changed in the same direction. Those who argue that IXCs have in fact flowed through all of the access charge reductions in retail prices typically base their contentions on changes in average revenues per minute (ARPM). But the decline in ARPM over the last several years almost certainly overstates the actual decline in prices, as the following considerations demonstrate:

- Suppose AT&T customers demand ten minutes of message toll service (MTS) for each minute of wide area toll service (WATS) (and no other services) and that the price of MTS (per minute) is twice that of WATS. If MTS and WATS prices increase by 1 percent but demand for WATS grows at 50 percent per year while MTS demand grows at 10 percent per year, then the ARPM of usage *decreases* by about one half a percent. In other words, *ARPM declines despite the fact that both of the component usage prices have increased.*
- Suppose the prices in the discount plan remain fixed, but customers are able to receive lower effective marginal prices when their usage expands (e.g., because they have installed fax machines). In that case ARPM would decline not because the price of usage declined but because customer demand increased. In fact, in this example, ARPM could decline even when the prices for low and high volume users increase if volume growth is sufficiently large. For example, suppose that at the starting point the price schedule for an average user is 20 cents for the first 100 minutes and 15 cents per minute thereafter; that those two price brackets are increased to 21 cents and 16 cents

[6] Federal-State Joint Board Staff. *FCC Monitoring Report*. May 1997. Table 5.12, p. 616.

respectively, but that the usage of the average customer grows from 150 to 250 minutes. In those circumstances, the ARPM would have been 18.33 cents per minute before the price increase and 18.0 cents afterward.

- Suppose, next, that the own-price elasticities for different services are different, even when the percentage price change for each is identical. For example, suppose (1) the price of service A is one dollar per minute, ten minutes are sold, and the A own-price elasticity is -0.2, and (2) service B has a price of 50 cents per minute, a demand of ten minutes and an own-price elasticity of -5.0. If the price of each of the services decreases by 10 percent, ARPM will decrease by 17 percent. Observe that the anomalous result is not caused by substitution of lower-priced service—their demands are assumed to be independent in this example—but reflects the inadequacies of the index itself.

- ARPM (as measured by the IXCs) goes down when facilities bypass is initiated by the end user, but this decline will overstate the effective reduction in price or cost savings enjoyed by the customer. For example, when a large customer builds a private network bypassing LEC access facilities, AT&T's ARPM from that customer could go down (relative to its MTS rates, which include the carrier access charge) but the cost per minute to the customer would have to reflect both AT&T charges (ARPM from AT&T's perspective) and its own network costs.

14. These examples illustrate two general tendencies for ARPM to exaggerate recent price reductions. First, when different prices are charged to different customer groups or for different services, differences in the rates of growth of their sales (whether or not caused by the change in prices) can cause aggregate ARPM to overstate price reductions. Second, ARPM

from any one IXC will misstate end user costs when end users assemble services through a variety of vendors.[7]

15 The long-distance carriers have strongly criticized the high charges they typically have to pay the LECs for access to their networks. Those charges have indeed been set by regulators far above cost, deliberately, in order to perpetuate the subsidy that had, before AT&T was split up, flowed from similarly inflated long distance charges to hold down the rates for basic residential service. By any measure, however, AT&T's own average markups above those access charges and above its own long-run incremental costs continue to be at least as large as the markups in the access charges themselves.

16. In 1996 AT&T's average revenue per minute was about 17.3 cents and its access charges averaged about 5.3 cents per minute, thus producing revenue net of access charges that averaged 12 cents—a figure virtually unchanged from 1994.[8] Incremental toll cost estimates range from 1-2 cents per minute at the low end to about 6-7 cents at the high end. The higher values include non-network costs such as overhead, customer and marketing costs, not all of which are likely to be properly includable in the incremental cost of offering the service. Carrier access incremental costs are only 1 cent per conversation minute or less.[9] Adding the access

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[7] Changes in average access cost per minute (AAPM)—reflecting changes in payments *to LECs*—will likewise exaggerate the reductions in access costs that IXCs or their customers have actually realized when they bypass LEC facilities. The tendency that we have described for ARPM to overstate price reductions is therefore offset to some extent by the similar tendency for AAPM to overstate reductions in access charges. At most the errors cancel one another. What is far more likely is that ARPM net of access overstates the actual reduction in prices or costs borne by customers: ARPM is likely to err by more than AAPM, because in every situation where AAPM is biased downward (i.e., when LEC access is bypassed) so is ARPM, and there are a variety of other situations in which only ARPM is biased downward.

[8] AT&T's average revenue per minute was 18 cents in 1994 and its access charges averaged 6 cents per minute (AT&T *ex parte* letter in CC Docket No. 94-1, March 21, 1995). Data presented by Hubbard and Lehr (*op cit.*, Figure 3) show that while AT&T's average revenue per minute declined by about 0.7 cents between 1994 and 1996, this decline was almost identical to the decrease in access charges over the same period.

[9] AT&T economists cite incremental costs of carrier access between 1/3 and 1/2 cents per minute. They are silent on the question of long-distance incremental costs. D. Kaserman, J. Mayo, M. Crew, N. Economides, G.

charge and the incremental production cost produces a range between 6.3 and 12.3 cents per minute for long distance and margins that range between 5 and 11 cents, compared with margins of 5 cents for access charges.[10]

17. Thus, while a group of economists assembled by AT&T are correct in asserting that

> (i)f there is one factual issue in the telecommunications industry upon which there is virtually unanimous agreement, it is that carrier access services are currently priced well in excess of their incremental costs.[11]

Hubbard, P. Kleindorfer and C. Martins-Filho, "Local Competition Issues and the Telecommunications Act of 1996," prepared on behalf of AT&T, July 15, 1996, p. 27.

[10] As the ranges of the figures for AT&T demonstrate, this comparison is highly sensitive to the estimate we employ for the LRIC of its operations.

The sources of the 1-2 cent per minute figure are Lewis J. Perl and Jonathan Falk, *The Use of Econometric Analysis in Estimating Marginal Cost*, Presented at Bellcore and Bell Canada Industry Forum, San Diego, California, April 6, 1989, Table 2; R.W. Crandall and L. Waverman, *Talk Is Cheap*, Washington: Brookings, 1996, p. 92; Paul W. MacAvoy, *The Failure of Antitrust and Regulation to Establish Competition in Long-Distance Telephone Services*, MIT and AEI Presses, 1996, p. 115, citing an estimate by Wharton Econometric Forecasting Associates; and Lehman Brothers, *Telecom Services: Buy the Bundle Builders, Get the Growth*, March 18, 1996: "Large customers and large resellers can purchase transport at close to long-run incremental costs, or at about the $0.02 per minute in average depreciation and network engineering costs of the major players (this is the rate that the federal government recently negotiated on its multiyear FTS 2000 contract for POP-to-POP transport)." (p. 28). It seems likely, however, that these various figures fail to include such marketing, customer service and overhead costs as would be properly part of the LRIC of the *total service*.

The bases for the 6-7 cents at the high end are the statement by Crandall and Waverman that "the incremental cost of long-distance service is probably no more than 5 cents and surely no more than 10 cents per minute" (pp. 276-277), considered together with their citation of the Company's reported operating, marketing and customer service and general and administrative costs, which they take to be on the order of 3.9, 3.7 and 2.9 cents per minute, respectively (p. 142). While all or a large portion of the first two categories are probably part of its TSLRIC (as contrasted with the LRIC of smaller increments), it seems highly unlikely that that would be true also of the general and administrative costs. The estimate of 11.4 to 12.4 cents, including the access charge, is from their Joint Affidavit on behalf of Ameritech Michigan, In the Matter of Application of Ameritech Michigan Pursuant to Section 271 of the Telecommunications Act of 1996 to Provide In-Region, InterLATA Services in Michigan, CC Docket No. 97-137).

Clearly, some of these last costs are average, rather than marginal in nature. Since average costs for this industry tend to exceed incremental cost, this last Crandall and Waverman estimate does not contradict our range. Even their upper limit produces a 5.6 cent markup, one just as large as is incorporated in the access charge.

[11] *Op. cit., supra* note 9, p. 26.

they are wrong in their selectively pejorative treatment of those particular prices. While the LECs mark up their carrier access prices over incremental cost by (say) a nickel, AT&T marks up long distance prices over incremental cost by at least a nickel and perhaps several cents more. Thus the AT&T economists are wearing blinders when they condemn the former markup—whose explicit purpose is to contribute to achieving the public policy goal of universal subscription—as a "regulatory-sanctioned pricing distortion"—"clearly an anathema to economic efficiency," with cumulative social costs "certain to run into the billions of dollars per year" (at 27)—while AT&T itself extracts for its shareholders at least as high a markup per minute in its own retail toll rates, in a market it claims to be fully competitive.

18. As the foregoing discussion has demonstrated, cost measurement in these markets is fraught with difficulty and contentiousness, with small absolute differences in estimated costs producing large differences in the estimated percentage markups. Moreover, there may well be large differences between the short-run marginal costs that it might be sufficient for individual sales, to individual customers, to recover for the transactions to be profitable and the long-run incremental costs that companies would have to recover if they were to continue to provide service to large groups or the totality of their customers. There is probably a large difference also between the total long-run incremental cost of serving large business customers, on the one side, and residential, on the other. Even with all these qualifications, the prices at which sales are actually being made provide at least a suggestion of the *upper bound* of incremental costs. And this type of information tends to corroborate our upper bound of 11 cents per minute. For example, long distance carriers are offering intraLATA toll service for 8 cents per minute in California—a figure roughly equivalent to an interLATA

price of 10 to 11 cents per minute, because in-state access charges in California are lower than the national average. AT&T offers in-state toll calls at 5 cents per minute in Connecticut.

19. There are two possible interpretations of these low prices of intraLATA offerings. One is that the IXCs' costs for these services may, in fact, be higher—as they almost certainly are in the Connecticut case—but the carrier is able to offer these prices profitably because it expects to bundle the intraLATA with compensatingly higher-margin interLATA offerings—thus confirming our basic point. Alternatively, the prices are compensatory in isolation, implying that costs are no higher than that. Either interpretation supports our conclusion that the IXCs' prices contain healthy margins.

2. Distribution of the benefits of competition between large and small users

20. Large business customers have benefited greatly from the new competition in the long distance business. The combination of the large volume of their business, on the one side, and, on the other, the very wide gap between the incremental costs of the IXCs and their average rates has forced the IXCs into intense competition in offering special contractual arrangements, incorporating both special prices and new and superior service offerings. As the FCC has observed, large customers now solicit proposals from multiple vendors and negotiate terms directly with the interexchange carriers.[12]

21. The price reductions have been dramatic: the average charge for a minute of long-distance service for a large corporation appears to have fallen by about 80 percent (nominally,

[12] Report and Order, In the Matter of Competition in the Interstate Interexchange Marketplace, CC Docket No 90-132, FCC, 6 FCC Rcd. 5880, 5887, Adopted: August 1, 1991, Released: September 16, 1991, par. 38

and even more in inflation-adjusted dollars) since 1983.[13] Prices in 1983 were at about 35 cents per minute and are now at about 7 cents per minute for the largest business customers.[14]

22. Small residential subscribers have not benefited to anything like the same degree.[15] In contrast with the estimated 80 percent decline for large business customers, long distance prices for residential consumers (as measured by the CPI) have declined by about 20 percent since 1984, which implies a price decrease of about 6 cents per minute for them.[16] During the same period, access charges declined 11 cents.

23. About one-half of the apparent 5 cents per minute increase in residential rates net of access charges occurred after the beginning of 1994. AT&T increased the basic rate for residential interstate calling in January 1994 by an average of 6.3 percent—an increase targeted at low-volume subscribers as well as ones under its residential calling plans indexed to the basic rate.[17] It increased rates further by 3.7 percent in December 1994,[18] and 4.3 percent and 5.9

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[13] Michael T. Felix, "Preparing the Market for Enhanced Service Implementation," *Telephony*, Vol. 230, No. 13, March 25, 1996, p. 40.

[14] David Rohde, "VPN Rates On The Way Down," *Network World*, December 2, 1996, Vol. 13, No. 48, pp. 1, 14-15; Table 7.12, *Statistics of Communications Common Carriers*, Federal Communications Commission, 1988/1989 Edition, p. 286; Felix, "Preparing the Market ...," *Telephony*, p. 40; Crandall & Waverman, *Talk Is Cheap*, p. 125; "GSA Tells Congress FTS 2000 Prices Beat Market Rates," *Telecommunications Reports*, March 8, 1993.

[15] The FCC therefore recently admonished participating parties in Sec. 271 proceedings " ... in determining the extent to which BOC entry into the long distance market would further competition, we would find it more persuasive if parties presented specific information as to how such entry will bring the benefits of competition, including lower prices, to *all* segments of the long distance market." Memorandum Opinion and Order, In the Matter of Application of Ameritech Michigan Pursuant to Section 271 of the Communications Act of 1934, as amended, To Provide In-Region, InterLATA Services in Michigan, CC Docket No. 97-136, Released August 19, 1997, par. 16. ("Ameritech Order")

[16] AT&T reported an average revenue per minute (ARPM) for its Consumer markets of about 23 cents in 1994. Ex Parte Presentation in Support of AT&T's Motion for Reclassification as a Nondominant Carrier, Attachment I, Letter from C.L. Ward, AT&T, to William F. Caton, FCC, dated February 8, 1995. We used changes in the pertinent CPI index to estimate ARPM for other years, in particular, 1984 and 1997.

[17] "AT&T Proposes $750 Million Rate Hike, New Calling Plan Aimed At High-Volume Residential Users," *Telecommunications Reports*, January 3, 1994.

[18] John J. Keller, "AT&T and Rivals Boost Rates Further," *The Wall Street Journal*, November 29, 1996, p. A3.

percent, respectively, in February and December 1996.[19] In each instance, MCI and Sprint followed in lock step.[20] These increases over that two and one-half year period occurred in the face of a continued drop in carrier access charges—by about 10 percent—during the same period.[21] Over the entire five year period from the beginning of 1992 to the close of 1996, AT&T increased these basic rates—paid by the majority of its residential customers—by 24.7 percent, while access charges declined.[22]

24. We must of course consider the possibility that this dramatic difference in the trend of long-distance charges to large business and small residential customers represented a correction of a previous distortion—specifically, cross-subsidization of the latter rates at the expense of the former—such as would be expected to take place with the introduction of effective competition. This is the claim of Bernheim and Willig—that the costs per minute of serving low-volume customers is significantly higher than of serving high-volume ones because of the presence of fixed customer costs, such as billing, collections, fraud and customer service, that do not vary with usage for any given subscriber.[23]

25. For purposes of testing this possible justification of the increase in AT&T's long-distance charges, net of access fees, to small residential users, we use the Company's own

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[19] "AT&T Follows MCI, Sprint with Long Distance Rate Increases." *Telecommunications Reports*, December 2, 1996.

[20] See par. 30, below, on the FCC's expression of concern about this pattern of price leadership.

[21] Access charges per conversation minute declined by 9.34 percent (from 6.66 cents to 6.04 cents) between July 1993 and May 1997, although there occurred a brief intervening increase from 6.66 cents to 6.89 cents, or about 3.4 percent, in July of 1994. (See Table 5.2 in *FCC Monitoring Report*, May 1997, p. 616.) On the further reduction in mid 1997, see note 22, immediately following, and par. 29, below.

[22] Calculated from contemporaneous news accounts. This five-year increase was offset in mid 1997 by an 8 percent decrease in basic rates, in fulfillment of AT&T's promise to the FCC to pass through the latest reduction in access charges. *New York Times*, July 1, 1997.

[23] B. Douglas Bernheim and Robert Willig, "An Analysis of the MFJ Line of Business Restrictions," December 1, 1994, Attachment G, Ex Parte Presentation in Support of AT&T's Motion for Reclassification as a Nondominant Carrier, CC Docket No. 79-252, April 20, 1995.

definition of low-volume residential customers as ones with long distance charges of $10 per month or less: these are the people who pay the basic rates that have been subject to the recent increases.[24] AT&T says that more than half of its customers fall in this category. It also asserts that customers with average monthly bills under $3 are below the "break-even point."[25] This claim suggests that, to the extent these last customers can be segregated, rates charged them would indeed be expected to increase under real-world competitive conditions, even though presumably the *marginal* costs of their long-distance *calling* would be no higher than for higher-volume customers.[26] But it would neither explain nor justify the increases in basic usage rates undiluted by discount offerings that at least half of residential users were forced to pay on grounds of either *average* cost per customer or marginal cost of usage: the group in the $3 to $10 per month range, with four times the usage of the ones below AT&T's claimed $3 break-even point, must have been making a very large contribution to company profits.

26. The only possible explanation for their having fared so much less well under competition than large business customers is that the long-distance carriers serving them have found it easier to resist the temptation to engage in price competition for their patronage than for that of the big users. We observe repeatedly in AT&T's pricing behavior the kind of price leadership that denies low-volume customers the full benefits of competition, once the adoption of alternative regulation permitted it to increase its basic rate schedule

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[24] Letter of C.L. Ward to W.F. Caton Dated March 9, 1995 Re: Ex Parte Presentation CC Dockets Nos. 79-252, 93-197, 80-286; D.J. Quinn, *The Light User Segment of the Long Distance Market*, March 8, 1995, p. 8.

[25] *Ibid.*

[26] That is to say, under theoretically pure competition, under which rates for usage would be held to marginal (usage-sensitive) costs, the higher *average* costs of the very low-volume users would not be reflected in usage rates higher than those charged heavier users. Since, however, the former particular customers would in those circumstances not be worth serving at all in these circumstances, providers of long-distance service to them would have to be compensated for the fixed per-customer costs either by levying a flat charge on them or by finding a way of charging them discriminatorily higher rates for usage.

27. Incumbent IXCs have recently introduced discount plans that they claim provide lower prices to smaller users.[27] For example, Hubbard and Lehr claim that users making $5-$10 per month of long-distance calls are benefiting from AT&T's one rate (15 cents per minute) plan. In fact, their own data (Figure 5) show that customers in the $5-$10 range experienced price increases between 1992 and 1996.[28] The only way they are able to show a price decrease thereafter is by constructing an artificial price of 15 cents per minute for 1997, on the ground that customers "need pay no more" than this amount. And even their artificial 1997 price does no better than restore users in the $5-$10 category to the price that their own data (in Figure 5) show those customers were charged in 1990, despite the continued decline during this period in the access charge their suppliers paid.

28. Marybeth M. Banks makes similar arguments on behalf of Sprint, in response to the 1997 271 application of SBC Communications Inc., et al. in this state.[29] Although her own Figure 1 shows that prices for offerings that were available throughout the period she examined increased steadily after 1992, she claims that prices have recently declined because of the introduction of new discount plans. It is clear, however, that (1) her conclusion depends on what proportion of customers have actually chosen these plans (she claims, without documentation, that a majority have actually done so; even if this assertion is correct, it clearly means that the average price will have been higher than the price available under the most attractive plan) and (2) the deep discounts are a recent phenomenon, introduced in 1996 or later.

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[27] Affidavit of R. Glenn Hubbard and William H. Lehr, *op. cit.* Statement of Marybeth M. Banks, Sprint Communications Company, L.P., Submitted to the Federal Communications Commission, CC Docket No. 97-121, May 1, 1997.

[28] They do not even attempt to show what has happened to customers in the $0-$5 range, a group that has disproportionately experienced the undisputed increase in the basic tariff.

[29] *Op. cit.*